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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,529	08/15/2003	Joseph P. Errico	F-247	3170
530	7590	07/05/2006	EXAMINER	
LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			PELLEGRINO, BRIAN E	
			ART UNIT	PAPER NUMBER
			3738	

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/642,529		ERRICO ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Brian E. Pellegrino		3738	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 April 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION*****Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "exterior surface having a groove with a coating disposed within the groove over a portion of a wire mesh" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the written disclosure failed to describe the exterior surfaces having a "groove" and the "perimeter of the contact element being disposed in the groove."

### ***Claim Objections***

Claims 25,36,37 are objected to because of the following informalities: these claims depend from canceled claims. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 21-24,26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner (5370697) in view of Hedman et al. (4759769) and Krebs et al. (5926685). Baumgartner shows (Fig. 5) a vertebral contact element **44** having a resting shape of a dome convexly extending from an orthopedic device **2**. Baumgartner discloses the contact element is a wire mesh (col. 3, lines 54-57) that is porous. The mesh is fully capable of having a convexity depth or footprint approximating the depth of

Art Unit: 3738

a concave surface in a vertebrae. However, Baumgartner fails to disclose the outer surface having a groove or an osteoconductive feature, such as a coating for attaching the contact element. Hedman et al. teach (Figs. 1,2) that a recess or groove **34,52** is used in the plate surfaces to secure or retain the resilient spring elements therein, col. 3, lines 24-26. Krebs et al. teach that a coating or binder is used to secure a metal mesh to the surface of the implant, col. 2, lines 14,17,36-39. It would have been obvious to one of ordinary skill in the art to incorporate a groove in the exterior surface to retain a compressible member therein as taught by Hedman et al. and utilize a coating or binder as taught by Krebs et al. in the implant of Baumgartner such that together, the incorporation of these exterior surface modifications secure the mesh to the implant stronger and eliminates any sliding or dislodgement of the mesh from the baseplates.

Claim 21,25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner (5370697) in view of Hedman et al. (4759769) and Koch et al. (4969907). Baumgartner in view of Hedman is explained supra. However, Baumgartner as modified by Hedman fail to disclose a coating such as plasma spray for securing a metal to an implant surface. Koch et al. teach an implant **1** body's exterior surface has a coating **5** to secure a contact element **6**. Koch also teaches that the coating secures the implant to the contact element and can be a plasma spray, col. 2, lines 3-6,44-48. It would have been obvious to one of ordinary skill in the art to incorporate a groove in the exterior surface to retain a compressible member therein as taught by Hedman et al. and utilize a coating or binder as taught by Krebs et al. in the implant of Baumgartner such that together, the incorporation of these exterior surface modifications secure the

Art Unit: 3738

mesh to the implant stronger and eliminates any sliding or dislodgement of the mesh from the baseplates.

Claims 31-34,36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner '697 in view of Krebs et al. '685. Baumgartner is explained supra. However, Baumgartner fails to disclose a coating dispersed over a perimeter region of the mesh or contact element to securely attach to the spacer body. Krebs et al. is explained above. It would have been obvious to one of ordinary skill in the art to utilize a coating as taught by Krebs et al. for securing a mesh to the surface in the Baumgartner implant such that it prevents the mesh from dislodged from the outer surface under spinal loads or while inserting the implant.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner '697 in view of Krebs et al. '685 as applied to claim 32 above, and further in view of Koch et al. '907. Baumgartner in view of Krebs as explained above. However, Baumgartner as modified by Krebs fail to disclose the coating is a plasma spray. It would have been obvious to one of ordinary skill in the art to modify the type of coating applied and utilize a plasma spray as taught by Koch with the implant of Baumgartner as modified by Krebs because technique of applying a plasma spray permits the implant to be coated in certain areas as opposed to an entire surface coating.

### ***Response to Arguments***

Applicant's arguments with respect to claims 21,31 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Pellegrino whose telephone number is 571-272-4756. The examiner can normally be reached on Monday-Thursday from 7:30am to 5pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC 3700, AU 3738

*Brian E. Pellegrino*

**BRIAN E. PELLEGRINO**  
**PRIMARY EXAMINER**

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.